	Application No.	Applicant(s)
Notice of Allowability	10/603,514	KENT ET AL.
	Examiner	Art Unit
	Michael Pervan	2629
		<u> </u>
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. This communication is responsive to <u>4/25/2006</u> .		
2. The allowed claim(s) is/are <u>2-10 and 12-22</u> .		
3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some* c) None of the:		
<ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> </ol>		
Copies of the certified copies of the priority documents have been received in this national stage application from the		
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached		
1)  hereto or 2)  to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.		
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. Motion of Informal B	atent Application (PTO-152)
2. ☐ Notice of Professor's Patent Drawing Review (PTO-948)	6. ☐ Interview Summary	
	Paper No./Mail Dat	te
<ol> <li>Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date 4/25/2006</li> </ol>	8), 7. 🛛 Examiner's Amendr	ment/Comment
Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. 🛛 Examiner's Stateme	ent of Reasons for Allowance
or biological Material	9.	

## **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mrs. Marguerite E. Gerstner on May 16, 2006.

The application has been amended as follows:

Claim 3, line 1, please replace "0", with -10-.

## Allowable Subject Matter

- 2. Claims 2-10 and 12-22 are allowed.
- 3. The following is an examiner's statement of reasons for allowance:

Claim 10 recites among other features, the diffractive grating comprising alternating tines and slots, the coupling between the transducer and the substrate through the tines being approximately 180 degrees out of phase with the coupling between the transducer and the substrate through the slots.

Kushida discloses in Figure 1B an acoustic substrate 21 having a surface, an acoustic transducer 24 and an acoustically diffractive grating 22 disposed between the substrate and the transducer, the diffractive grating coupling acoustic energy within the acoustic transducer to an acoustic wave propagating along the surface of the substrate (see Figure 1B; col. 3, lines 35-39 and col. 4, lines 38-43).

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Kushida does not disclose a touch sensor or touch display device or a transparent acoustic substrate.

Adler discloses a touch sensor and a touch display device (col. 3, lines 60-67) and a transparent acoustic substrate (see Figures 1 and 2; col. 4, lines 5-8 lines 15-20, 53-68 and col. 5, lines 1-18).

Kushida and Adler do not disclose the diffractive grating comprising alternating tines and slots, the coupling between the transducer and the substrate through the tines being approximately 180 degrees out of phase with the coupling between the transducer and the substrate through the slots.

Claim 20 recites among other features, the diffractive grating comprising alternating tines and slots, the coupling between the transducer and the substrate through the tines being approximately 180 degrees out of phase with the coupling between the transducer and the substrate through the slots.

Kushida discloses in Figure 1B an acoustic transducer 24 and an acoustically diffractive grating 22 disposed between the substrate and the transducer, the diffractive grating coupling acoustic energy within the acoustic transducer 24 to an acoustic wave propagating (acoustic wave could propagate along a horizontal and vertical direction) along the surface of the substrate (see Figure 1B; col. 3, lines 35-39 and col. 4, lines 38-43).

Kushida does not disclose a touch sensor or touch display device or a transparent acoustic substrate.

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Adler discloses a touch sensor and a touch display device (col. 3, lines 60-67) and a transparent acoustic substrate (see Figures 1 and 2; col. 4, lines 5-8 lines 15-20, 53-68 and col. 5, lines 1-18).

Kushida and Adler do not disclose the diffractive grating comprising alternating tines and slots, the coupling between the transducer and the substrate through the tines being approximately 180 degrees out of phase with the coupling between the transducer and the substrate through the slots.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Pervan whose telephone number is (571) 272-0910. The examiner can normally be reached on Monday - Friday between 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MVP May 16, 2006

AMR A. AWAD
PRIMARY EXAMINER

Ami Ahmi Awai